MULTIMEDIA UNIVERSITY

MODULE TEST 1

TRIMESTER 1, **2020/2021**

EEE 3156 DIGITAL SYSTEM
(EE Group)

26 AUGUST 2020

30 Minutes

INSTRUCTION TO STUDENT

1.This Question paper consists of 2 pages including cover page with 1 Question only.

2. Attempt **ALL** questions.

3. Please write all your answers on the Answer Sheet / Examination Pad / A4 paper.

4. Please write your student ID on every page of your answer sheet.

5. Please save your answer document in PDF format (Your Student ID-T1.pdf) and upload the document to Google classroom within 10 minutes after the end of the examination.

Module Test 1:

(a)   Compute the characteristic equation of function, F for the circuit shown in Figure Q1.
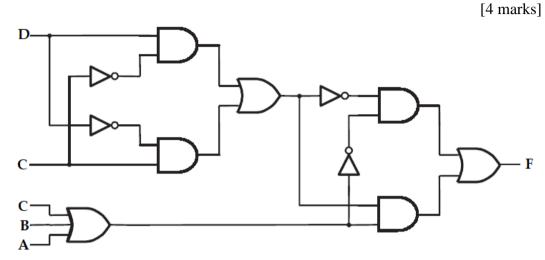
[4 marks]

Figure Q1

(b)   Construct the truth table of the circuit shown in Figure Q1.

[8 marks]

(c)   Compute the simplified characteristic equation of function, F.

[4 marks]

(d)   Design the function, F in part (c) using standard logic gates.

[6 marks]

(e)   Design the function, F in part (c) using 4-input look up table.

[3 marks]

End of Paper